I claim:

1. A tissue adhesive for controlling vigorously bleeding tissues comprising:
a mixture of ultrasonically treated fibrous protein, ultrasonically treated globular protein, and a cross-linking agent.

2. The tissue adhesive of claim 1 wherein the fibrous protein is collagen.

3. The collagen of claim 2 wherein said collagen is selected from the group consisting of human collagen, porcine collagen and bovine collagen.

4. The tissue adhesive of claim 1 wherein the globular protein is albumin.

5. The albumin of claim 4 wherein said albumin is selected from the group consisting of human albumin, porcine albumin and bovine albumin.

6. The tissue adhesive of claim 1 wherein the cross-linking agent comprises glutaraldehyde and a member selected from the group consisting of amino acids, polypeptides and proteins.

7. The cross-linking agent of claim 6 wherein the amino acid is glutamate.

8. The tissue adhesive of claim 1 wherein the ratio of ultrasonically treated fibrous protein to ultrasonically treated globular protein is approximately 1:1.

9. The ultrasonically treated fibrous protein of claim 8 wherein the fibrous protein component comprises an aqueous solution with approximately 35% to 45% collagen.

10. The ultrasonically treated globular protein of claim 8 wherein the globular protein component comprises an aqueous solution with approximately 35% to 45% albumin.

11. The tissue adhesive of claim 1 which develops a cohesive strength of at least 5 kg/cm^2 and an adhesive bonding strength of at least 1 kg/cm^2 within five minutes post application.

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12. The tissue adhesive of claim 1 further comprising approximately 0.01% methylene blue.

13. A bone adhesive comprising:
a mixture of ultrasonically treated fibrous protein, ultrasonically treated globular protein, a cross-linking agent and an aqueous alkaline magnesium carbonate solution.

14. The bone adhesive of claim 13 wherein the fibrous protein is collagen.

15. The collagen of claim 14 wherein said collagen is selected from the group consisting of human collagen, porcine collagen and bovine collagen.

16. The bone adhesive of claim 13 wherein the globular protein is albumin.

17. The albumin of claim 16 wherein said albumin is selected from the group consisting of human albumin, porcine albumin and bovine albumin.

18. The bone adhesive of claim 13 wherein the cross-linking agent comprises glutaraldehyde and a member selected from the group consisting of amino acids, polypeptides and proteins.

19. The cross-linking agent of claim 18 wherein the amino acid is glutamate.

20. The bone adhesive of claim 13 wherein the ratio of ultrasonically treated fibrous protein to ultrasonically treated globular protein is approximately 1:1.

21. The ultrasonically treated fibrous protein of claim 20 wherein the fibrous protein component comprises an aqueous solution with approximately 35% to 45% collagen.

22. The ultrasonically treated globular protein of claim 20 wherein the globular protein component comprises an aqueous solution with approximately 35% to 45% albumin.

23. The bone adhesive of claim 13 which develops a cohesive strength of at least 5 kg/cm^2 and an adhesive bonding strength of at least 1 kg/cm^2 within five minutes post application.

24. The bone adhesive of claim 13 further comprising approximately 0.01% methylene blue.

25. The bone adhesive of claim 13 further comprising approximately between 9% and 20% hydroxyapatite.

26. A system for sealing vigorously bleeding tissues comprising:
the tissue adhesive of claim 1 and a bio-compatible tissue patch.

27. A system for sealing leaking suture sites comprising:
the tissue adhesive of claim 1 and a bio-compatible tissue patch.

28. A system for closing an vascular opening comprising:
the tissue adhesive of claim 1 and a bio-compatible tissue patch.

29. A process for producing a tissue adhesive comprising the steps of:

a) subjecting a collagen solution to ultrasonic energy for approximately 12 hours at a controlled temperature,

b) subjecting an albumin solution to ultrasonic energy for approximately 2 hours at a controlled temperature,

c) concentrating said collagen and said albumin solutions,

d) combining said concentrated collagen and concentrated albumin solutions and mixing collagen and said albumin solutions with a chemical cross-linking agent.

30. The process for producing the tissue adhesive of claim 29 wherein said collagen solution in step (a) is a one percent aqueous solution.

31. The process for producing the tissue adhesive of claim 29 wherein said albumin solution in step (b) is a five percent aqueous solution.

32. The process for producing the tissue adhesive of claim 29 wherein said ultrasonic energy is approximately between 0.5 and 1.5 watts/cm^2 at approximately 20 kHz.

33. The process for producing the tissue adhesive of claim 29 wherein the concentration of the collagen solution in step (d) is approximately between 35% to 45%.

34. The process for producing the tissue adhesive of claim 29 wherein the concentration of the albumin solution in step (d) is approximately between 35% to 45%.

35. The process for producing the tissue adhesive of claim 29 wherein the cross-linking agent in step (d) comprises glutaraldehyde and a member selected from the group consisting of amino acids, polypeptides and proteins.

36. The process for producing the tissue adhesive of claim 29 further comprising the steps of adding methylene blue to a final concentration of 0.01%.

37. A method for sealing vigorously bleeding tissues comprising applying the tissue adhesive of claim 1 directly to said vigorously bleeding tissue in an amount sufficient to seal said tissue.

38. A method of repairing a break in a bone comprising applying the bone adhesive of claim 13 in an amount sufficient to secure said break in said bone.

39. A method for sealing a suture line comprising pre-treating a suture by applying the tissue adhesive of claim 1 prior to suturing tissues together with said pre-treated suture.